

510(k) Summary

(as required per 21CFR; §807.92)

Excalibur Light Therapy System

OCT 14 2004

I. Applicant Stargate International, Inc.
10235 South Progress Way #7
Parker, CO 80134
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II. Contact Name: Robert H. Walker; CEO
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III. Device Name

Proprietary Name Excalibur Light Therapy System
Common/Usual Name(s) Low Level Laser Therapy (LLLT)
Therapeutic Light System
Classification Name Infrared Lamp; (21CFR; §890.5500)
Product Code NHN

IV. Predicate Device/Substantial Equivalency

The Excalibur Light Therapy System is substantially equivalent to other pulsed low level therapeutic lasers and light therapy systems currently in commercial distribution. The Excalibur Light Therapy System has the same intended use and similar technological characteristics to predicate devices. It combines the clinically accepted therapeutic uses of previously FDA 510(k) approved light therapy systems currently in commercial distribution into one compact and cost-effective system.

The technological equivalence to the predicate devices is substantiated by the wavelength and power output generated by the one Excalibur System applicator head permanently attached to the basic unit. The Excalibur System will provide the same treatment benefits and regimens for clinical presentations already cleared by the Food and Drug Administration for the predicate devices.

The predicate devices the Excalibur System establishes equivalence to include the following:

<u>Predicate Device</u>	<u>510(k) #</u>	<u>Manufacturer</u>
Tuco Erchonia PL3000	K012580	Tuco Innovations
Quantum System	K032816	Stargate International

V. Intended Use of the Device

The Excalibur Light Therapy System is a non-heating lamp, infrared as described under the provisions of 21 CFR §890.5500 and is clinically indicated for:

- Adjunctive use in providing temporary relief of minor chronic neck and shoulder pain of musculoskeletal origin.

As with the predicate device, pain therapy treatment can be prescribed for pain associated with the clinical presentation specified above by having the beams pulsed or continuous with time considerations. The Excalibur Light Therapy System's variables conform to the performance specifications of the clinical parameters used by the predicate devices in frequency, wavelength, time, and power output.

VI. Description of the Device

The Excalibur Light Therapy System is a hand-held, non-invasive, pain therapy system which utilizes non-heating lamps consisting of two laser diodes in one applicator head. It combines the clinically accepted therapeutic treatment of numerous predicate light therapy systems currently in commercial distribution and 510(k) cleared.

The system consists of a basic hand-held, battery operated control unit and a permanently attached applicator head. The laser operates at a measured wavelength of 635nm ($\pm 1\%$) and complies with all performance, labeling, and manufacturing standards set forth in 21CFR Part 1040. Stargate International, Inc. is a registered laser manufacturer with the Food and Drug Administration.

The laser applicator head produces an output power of $\leq 4.5\text{mw}^2$ measured, per non-convergent beam and is classified as a Class IIIa laser.

VII. Summary of Technical Characteristics of the Device To Referenced Predicate Devices

The Excalibur Light Therapy System and the aforementioned predicate devices use Gallium Aluminum Arsenide (GaAlAs) diodes with non-convergent beam output to emit visible photonic energy to human tissue. The technology is dependent on the laws of physics in that the variables are frequency, wavelength, power output, and time.

The performance parameters and intended use of the Excalibur Light Therapy System are identical to all predicate devices.

VIII. System Testing

The testing of the Excalibur Light Therapy System includes functional performance, electrical safety, and component specification verification. This includes four-staged manufacturing testing and verification.

There is no software incorporated into the operation of the Excalibur Light Therapy System.

The Excalibur Light Therapy System is manufactured, performs, is labeled, and is tested to comply with the following standards:

- FCC Standard - 47CFR Part 15B
- All Electrical Components Utilized Are UL® Approved
- Class IIIa Laser - 21CFR Part 1040.

IX. Conclusions

In accordance with testing and comparison to the predicate devices, and pursuant to 21CFR; §890.500, the Excalibur Light Therapy System has the same intended use, with similar functional and performance characteristics.

The device meets or exceeds the design, testing, and labeling standards required by law. The Excalibur Light Therapy System is manufactured and performs as intended and does not raise any new regulatory, safety, and/or clinical efficacy issues.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

OCT 14 2004

Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

Mr. Robert H. Walker
Chief Executive Officer
Stargate International, Inc.
10235 South Progress Way, #7
Parker, Colorado 80134

Re: K041530
Trade/Device Name: Excalibur Light Therapy System
Regulation Number: 21 CFR 890-5500
Regulation Name: Lamp, non-heating for adjunctive use in pain therapy
Regulatory Class: II
Product Code: NHN
Dated: September 3, 2004
Received: September 7, 2004

Dear Mr. Walker:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

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This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

Miriam C. Provost
for

Celia M. Witten, Ph.D., M.D.

Director

Division of General, Restorative
and Neurological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

Indications For Use

510(k) Number (if known): K041530

Device Name: Excalibur Light Therapy System

Indications For Use: The Excalibur Light Therapy System is a non-heating lamp, infrared as described under the provisions of 21 CFR §890.5500 and is indicated for:

Adjunctive use in providing temporary relief of minor chronic neck and shoulder pain of musculoskeletal origin.

Prescription Use _____
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use _____
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Miriam C. Provost
(Division Sign-Off)

**Division of General, Restorative,
and Neurological Devices**

510(k) Number K041530